## ABSTRACT OF THE DISCLOSURE

The purpose of the present invention is to provide a method that can be easily applied to friction stir welding where the thickness of face plates at one welding portion is different from the thickness of face plates at another welding portion. Three shape members 10, 11, 12 having two butt joint portions are mounted on a jig 15. The face plate 14 of shape member 10 is thick and the face plate 14 of shape member 12 is thin. The protruded height of projection 18 is greater at portion B where surface plates 14 being welded are thin than the protruded height of projection A where surface plates 14 are thick. The depths for inserting rotary tools to shape members 10, 11, 12 for friction stir welding are the same. Friction stir welding is facilitated since the size and insertion depth of all the rotary tools being applied can be the same.